

Russel 09/914,424

=> fil hcaplu

FILE 'HCAPLUS' ENTERED AT 09:51:09 ON 05 AUG 2003  
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FILE COVERS 1907 - 5 Aug 2003 VOL 139 ISS 6  
FILE LAST UPDATED: 4 Aug 2003 (20030804/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que

L1 STR

NH-CH2-CH2-S-S-CH2-CH2-NH2  
1 2 3 4 5 6 7 8

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L4 248 SEA FILE=REGISTRY SSS FUL L1

L5 2325 SEA FILE=HCAPLUS ABB=ON L4

L6 1 SEA FILE=HCAPLUS ABB=ON L5 AND (ADHES? OR GLUE?) (L)SURG?

=> d ibib abs hitrn 16

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:613038 HCAPLUS

DOCUMENT NUMBER: 121:213038

TITLE: Crosslinkable derivatives of collagen, process for their preparation, and their use in the preparation of biomaterials for prostheses or other medical articles

INVENTOR(S): Gagnieu, Christian

PATENT ASSIGNEE(S): Flamel Technologies, S. A., Fr.

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

Searched by M. Smith

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 575273	A1	19931222	EP 1993-420255	19930617
EP 575273	B1	19971203		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
FR 2692582	A1	19931224	FR 1992-7692	19920618
FR 2692582	B1	19980918		
US 5412076	A	19950502	US 1993-77605	19930617
AT 160798	E	19971215	AT 1993-420255	19930617
ES 2113511	T3	19980501	ES 1993-420255	19930617
JP 06080935	A2	19940322	JP 1993-148108	19930618
PRIORITY APPLN. INFO.:			FR 1992-7692	19920618
AB Crosslinkable collagens are disclosed which are sol. in water and/or aprotic polar org. solvents; the collagens have a free or substituted thiol function on residues of cysteine or derivs. thereof (homocysteine, cysteamine, etc.), the residues being bonded to collagen at least in part via a spacer compd (e.g. a dicarboxylic acid). Prepn. of the modified collagens is also provided. The modified collagens are useful for biomaterials for medical articles (prostheses, implants, etc.). Thus, a cysteaminy succinyl collagen was prepd. using bovine atelocollagen types I and III and disuccinylcystamine. The product was used in the formulation of a gel and of a film. Ex vivo evaluation of tissue adhesion (with rabbit muscle tissue) using a product of the invention is also described.				
IT	51-85-4DP, Cystamine, collagen reaction products RL: PREP (Preparation) (crosslinkable, prepn. of, for biomaterial for prosthetic or other medical article)			
IT	56-17-7DP, Cystamine hydrochloride, reaction products with succinyl atelocollagen RL: PREP (Preparation) (prepn. of, for crosslinkable collagen thiol deriv. for biomaterial for prosthetic or other medical article)			
IT	56-17-7, Cystamine hydrochloride RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in crosslinkable collagen thiol deriv. prepn. for biomaterial for prosthetic or other medical article)			

=&gt; d stat que

L1 STR

$$\text{NH}-\text{CH}_2-\text{CH}_2-\text{S}-\text{S}-\text{CH}_2-\text{CH}_2-\text{NH}_2$$

1 2 3 4 5 6 7 8

## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

## STEREO ATTRIBUTES: NONE

L4 248 SEA FILE=REGISTRY SSS FUL L1

L5 2325 SEA FILE=HCAPLUS ABB=ON L4

L6 1 SEA FILE=HCAPLUS ABB=ON L5 AND (ADHES? OR GLUE?) (L) SURG?

Russel 09/914,424

L7 2 SEA FILE=HCAPLUS ABB=ON L5 AND CROSSLINK?(5A)COLLAGEN?  
L8 1 SEA FILE=HCAPLUS ABB=ON L7 NOT L6

=> d ibib abs hitrn 18

L8 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:61212 HCAPLUS  
DOCUMENT NUMBER: 130:111488  
TITLE: Improved regenerated collagen fiber and method of  
manufacturing the same  
INVENTOR(S): Sakashita, Shinichi; Tsugawa, Mamoru; Goto, Masaoki;  
Matsumura, Kunihiro; Hirokawa, Norio  
PATENT ASSIGNEE(S): Kaneka Corporation, Japan  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 890663	A2	19990113	EP 1998-112889	19980710
EP 890663	A3	19990714		
EP 890663	B1	20021113		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11323727	A2	19991126	JP 1998-116819	19980427
CN 1207422	A	19990210	CN 1998-117804	19980709
CN 1100165	B	20030129		
US 6160096	A	20001212	US 1998-113423	19980710
PRIORITY APPLN. INFO.:				
			JP 1997-186794	A 19970711
			JP 1998-61378	A 19980312
			JP 1998-116819	A 19980427

OTHER SOURCE(S): MARPAT 130:111488

AB The title fibers exhibit draping, luster, and feel close to those of a natural protein fiber such as a human hair and capable of application of a permanent wave treatment, wherein the amino groups and/or carboxyl groups of the regenerated collagen are chem. modified to introduce mercapto groups and/or disulfide linkages. Thus, regenerated collagen fibers were treated with a soln. contg. cystamine dihydrochloride and 1-ethyl-3-(3'-dimethylaminopropyl)carbodiimide HCl.

IT 56-17-7DP, Cystamine dihydrochloride, reaction products with regenerated collagen fibers

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(modified regenerated collagen fibers for permanent wave treatment with retention of waved shapes)

Searched by M. Smith

Russel 09/914,424

=> d stat que

L1 STR

NH-CH2-CH2-S—S—CH2-CH2-NH2  
1 2 3 4 5 6 7 8

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L4 248 SEA FILE=REGISTRY SSS FUL L1  
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L7 2 SEA FILE=HCAPLUS ABB=ON L5 AND CROSSLINK?(5A)COLLAGEN?  
L8 1 SEA FILE=HCAPLUS ABB=ON L7 NOT L6  
L9 1 SEA FILE=HCAPLUS ABB=ON L5 AND (ADHES? OR GLUE?) (L) (SKIN? OR  
TISSUE?)  
L10 0 SEA FILE=HCAPLUS ABB=ON L9 NOT (L6 OR L8)

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:00:04 ON 05 AUG 2003

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STRUCTURE FILE UPDATES: 4 AUG 2003 HIGHEST RN 560991-54-0

DICTIONARY FILE UPDATES: 4 AUG 2003 HIGHEST RN 560991-54-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> str

:gra c8,c2 2,c2 9,c2 6,c2 13,dis